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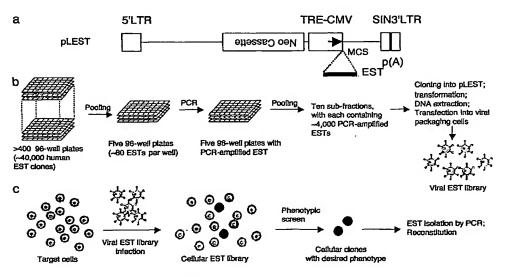
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(54) Title: METHODS AND COMPOSITIONS FOR HOMOZYGOUS GENE INACTIVATION USING COLLECTIONS OF PRE-DEFINED NUCLEOTIDE SEQUENCES COMPLEMENTARY TO CHROMOSOMAL TRANSCRIPTS



(57) Abstract: Methods and compositions for performing homozygous gene inactivation assays are provided. A feature of the subject methods is the use of a library of constructs that synthesize predefined nucleic acids, where each constituent predefined nucleic acid of the library is of known sequence that corresponds to a sequence of a chromosomal transcript, e.g., where a representative embodiment of a predefined nucleic acid is an expressed sequence tag (i.e., EST). In certain embodiments, the subject libraries are produced using an amplification protocol that preserves the sequence representation profile of the template nucleic acids. The subject methods and compositions find use in a variety of different applications, including the identification of novel diagnostic and therapeutic genetic targets.

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